

MAGNUS PHARMACEUTICALS

# Ostarine (MK-2866)

OStarine MK2866 10mg

**Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.**

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet.

## About

Ostarine is a second generation Selective Androgen Receptor Modulator (SARM). Though non-steroidal in structure, this drug is closely related to anabolic/androgenic steroids in its activity. Ostarine selectively activates the cellular androgen receptor (AR) in certain tissues, most notably skeletal muscle and bone. Here it supports constructive metabolism (anabolism). It is also believed to support satellite cell cycle activation, possibly outside of traditional AR binding. Ostarine is far less active in "androgenic" tissues such as the prostate and sex organs, however, which gives it a distinct separation of anabolic and androgenic effect. This drug is widely used in the sports community for muscle gain and fat loss, typically as an alternative to anabolic steroids.

Ostarine has been the most extensively studied drug of the SARM class to date. As of 2017, it has been the subject of 24 completed or ongoing human clinical trials, involving more than 1,500 participants in total. It has been under investigation in several different areas of therapy, including the treatment of cancer cachexia (muscle wasting), breast cancer, and stress urinary incontinence. To many in the fitness community, this has provided some sense of stability and safety as compared to many other new drugs of the SARM and peptides categories, which in many cases are devoid of human studies.

Thus far, Ostarine has established a consistent record of efficacy as an anabolic agent. For example, in one study with healthy elderly men and women, a dose of 3 mg per day for 12 weeks resulted in a significant 3% increase in LBM (+1.3 kg; 2.9 lbs.). There was also a significant reduction in fat mass of .6 kg. Physical function, as measured by stair climb power, was significantly improved (+15%) as well. With regard to its metabolic effects, Ostarine lowered resting serum glucose levels. This reflected improved insulin sensitivity. Another 12-week study in postmenopausal women reported a similar gain of 1.5 kg of LBM with 3 mg daily. Again, performance significantly improved as well. In this case, leg press strength increased by 22 lbs. At an anabolic-effective dose (3 mg/daily) Ostarine does not produce notable androgenic side effects. The prostate is not appreciably stimulated in men, nor are virilizing effects apparent in women. It also has minimal effect on serum free testosterone, dihydrotestosterone, estradiol (estrogen), follicle stimulating hormone (FSH), and luteinizing hormone (LH). In some patients, however, Ostarine did produce certain side effects commonly associated with oral anabolic steroid use. This includes mild elevations in liver enzymes, and negative alterations in serum lipids (see: Side Effects). Higher doses are likely to exacerbate some of these side effects. Likewise, Ostarine may appear "mild" at this time, but is not entirely devoid of "steroid-related" risk.

## Warnings

Ostarine is an unapproved new drug. A thorough understanding of its safety and propensity for side effects in humans is lacking at this time. However, this drug has been subject to extensive clinical trials in the United States. As such, there is a body of safety data to review.

## Side Effects

In clinical studies with Ostarine, the drug was generally well tolerated. The most common side effects at a 3 mg per day dose were nausea (4.2%), headache (20.8%), fatigue (8.3%), diarrhea (8.3%), pharyngolaryngeal pain (12.5%), back pain (12.5%), and pain in the extremities (4.2%). The drug also elevated serum alanine aminotransferase (ALT) levels in roughly 20% of patients, which is a marker of liver stress. Though ALT values exceeded normal in some cases, this rarely necessitated drug discontinuance. Liver enzymes should be monitored during use.

Similar to anabolic/androgenic steroids, Ostarine also suppresses HDL (good) cholesterol. This was reduced by 27% in study participants taking 3 mg. Likewise; the HDL/LDL ratio was significantly (negatively) impacted. However, there was also a tendency for reduced serum triglyceride levels, and lipid values of patients commonly remained within a normal (low cardiovascular risk) category. The potential impact of these changes on cardiovascular disease risk is unclear.

Many of the side effects of Ostarine do appear to be dose dependent. For example, at 9 mg per day the most common side effects were nausea (31%), fatigue (18%), and pain in the extremities (13%). These appeared with much higher frequency than with the 3 mg dose. The "mild" nature of this drug with regard to general side effects is likely to change as the dosage is escalated beyond the intended therapeutic range.

Suppressed testosterone was not a significant issue in clinical trials with Ostarine. This drug appears to weakly influence the HPTA in therapeutic doses. However, this is sometimes noted in anecdotal reports from the fitness community, where much higher doses are common. This may reflect dose-dependency in this area as well. In some cases, HPTA suppression during use may necessitate a post-cycle therapy program.

Visual disturbances such as night blindness and/or yellowing tint to the vision, which are common with Andarine, are much less frequently reported with Ostarine. These do transiently appear in some users according to anecdotal reports, however. As such, this side effect cannot be completely excluded. Although the visual side effects of SARMS are poorly understood, they typically do resolve on their own shortly after the drug is discontinued.

## Administration

Ostarine is given orally. This substance has not been approved for use in humans. Prescribing guidelines are unavailable. During clinical studies, it was most often administered at a dosage of 3 mg, 9 mg, or 18 mg per day.

When used for physique- or performance-enhancing purposes, Ostarine is commonly used at a dosage of 10-30 mg, which is given once per day. Women usually take lower doses than men, usually opting for the low end of the range. Cycles usually last 4-8 weeks. The results from its use are typically characterized by moderate gains in lean mass, which is accompanied by measurable fat loss and a distinct strength increase. The effects are often qualitatively and quantitatively compared to a milder oral anabolic, such as oxandrolone or stanozolol.

It is typically advised to taper-up the dosage of Ostarine, so that the user becomes accustomed to the effects of the drug. This usually involves beginning with a 10 mg daily dose. This is increased by 5 mg every 7 days, until a comfortable dosage level is established.